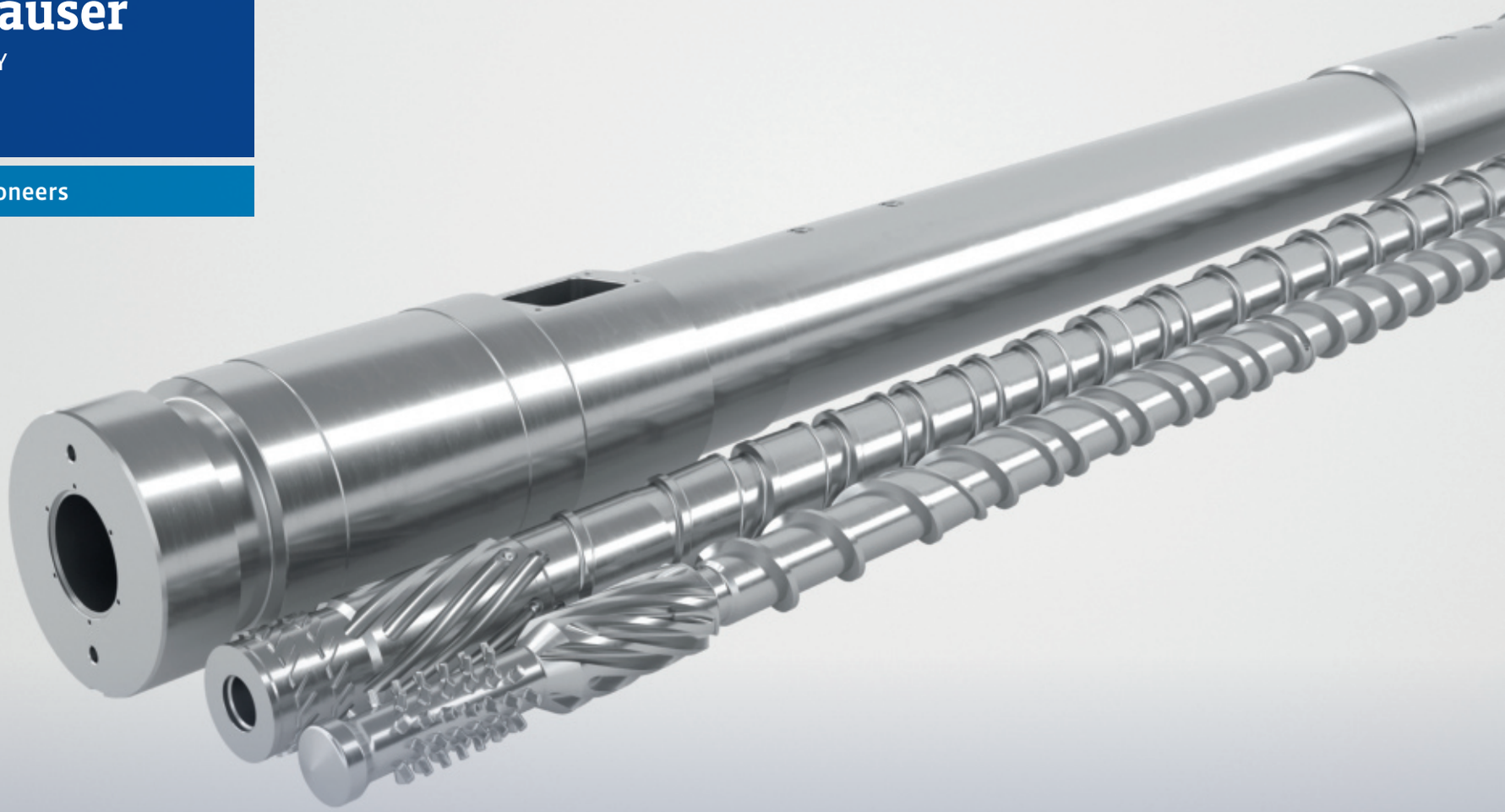
Reifenhäuser
REILOY

The Extrusioneers



REILOY SCREWS & BARRELS

Long-Term Cost-Effective Production – Even under the Toughest Conditions

COMPONENTS DETERMINE THE COST-EFFECTIVENESS OF YOUR PLASTICIZING UNIT

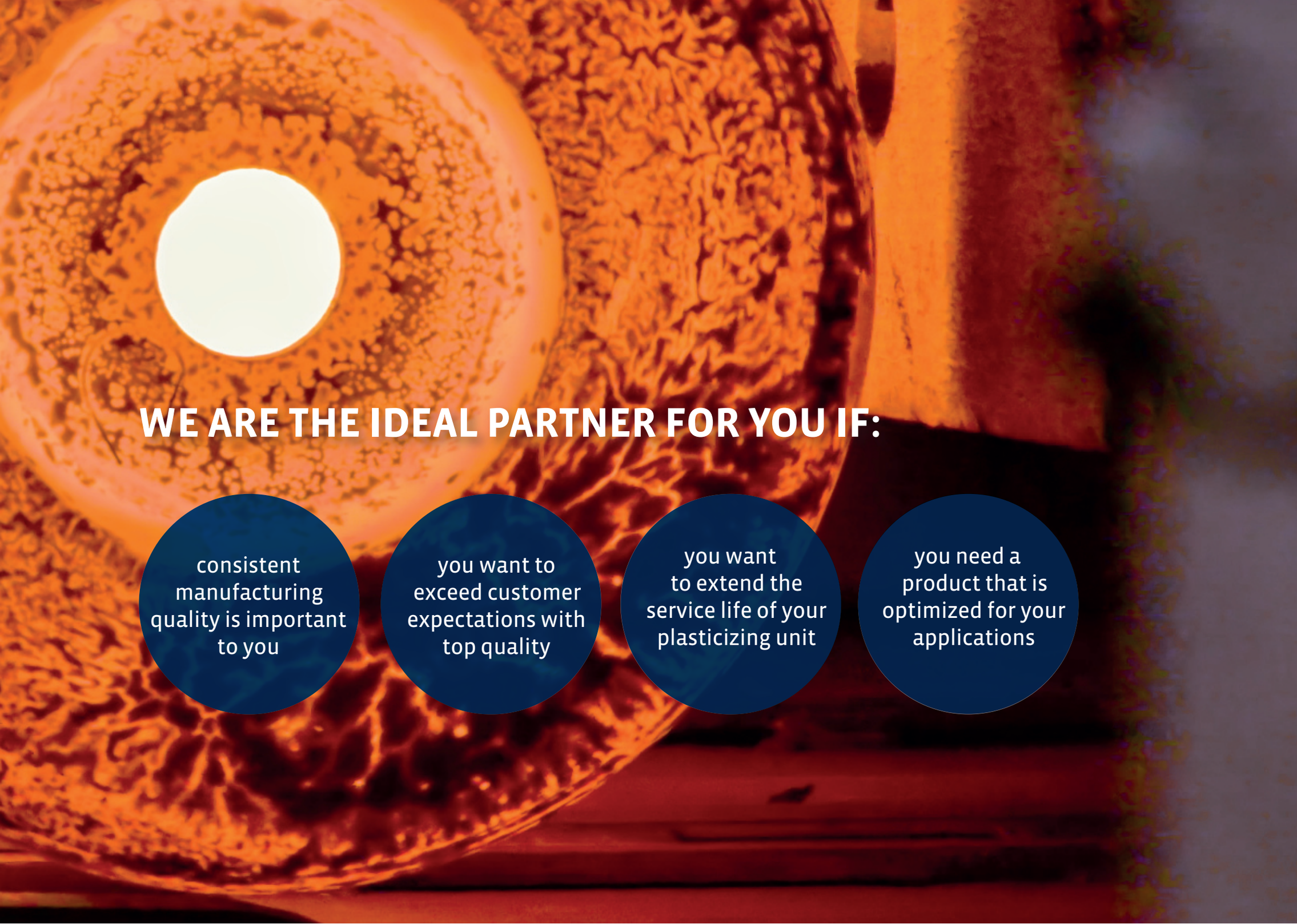
If screws and barrels need to be operated continuously under the toughest conditions with no downtime, the requirements call for long life, high availability, and efficiency. Our unique wear protection technologies prolong the service life of extrusion and injection molding machines, increase productivity, and raise the quality of end products – giving you even greater success in the market you serve.

Reifenhäuser Reiloy

METALLURGICAL COMPETENCE MEETS PRODUCTION KNOW-HOW

No manufacturer should miss out on business success because line components are not optimally matched to production targets. We therefore offer customized components at the price of standard solutions that are compatible with all line manufacturers and quickly pay for themselves. Benefit from our decades of experience, our process know-how from the Reifenhäuser Group, our own production processes, our wear protection know-how and the direct contact between engineers.

- 50 years of **experience**
- **In-house production** from alloy powder to finished component
- **Best wear protection** in the industry
- Excellent **development expertise**
- **Understanding** the overall process



WE ARE THE IDEAL PARTNER FOR YOU IF:

- consistent manufacturing quality is important to you
- you want to exceed customer expectations with top quality
- you want to extend the service life of your plasticizing unit
- you need a product that is optimized for your applications

Scan the
QR code to
learn more!

Reiloy

SCREWS

Your requirements for the service life and cost-effectiveness of your plasticizing unit are what determines the right screw for your application. In a step-by-step consultation, we will guide you to the optimum combination of screw geometry, wear protection, and material pairing to help you to achieve your production goals. Let us surprise you with an unbeatable price-performance ratio.

Scan
for more information

SMART

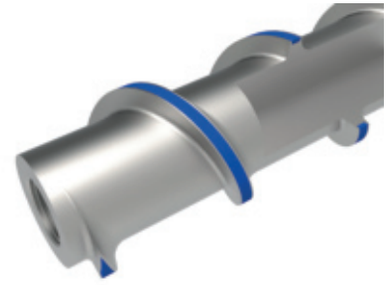
For Use in Standard Applications

Screws with high surface hardness.

ADVANCED

For Plastics with Low Filler Content

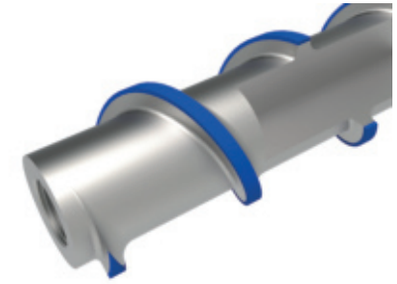
Overwelded version for high resistance to abrasive wear on flight surfaces. Suitable for corrosion and abrasion-resistant substrates depending on the application.



PREMIUM

For Plastics with a Filler Content >30 %

Maximum resistance to abrasive, corrosive and adhesive wear. Overwelded version to protect the complete flight surface. Suitable for applications with extreme wear conditions.



SELECT

For Special Applications

We offer special alloys for the production of highly demanding applications such as the processing of PTFE, PFA, or FEP.

Scan the
QR code to
learn more!

Reiloy

BARRELS

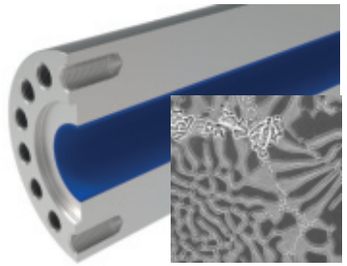
To keep your extrusion or injection molding equipment working as productively as possible, you need barrels with a long service life that are a perfect match for your production. Reiloy offers you top-of-the-line bimetallic barrels with economical wear protection. They have been proven to help your plasticizing units withstand adhesion, abrasion and corrosion for longer – even when processing wear-intensive raw materials.

Scan
for more information

SMART

For Plastics with a Filler Content of up to 30 %

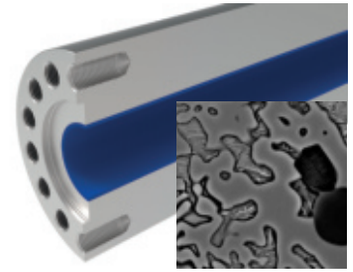
Hard metal alloy on iron base. Excellent wear resistance and good corrosion resistance.



ADVANCED

For Plastics with a Filler Content of up to 40 %

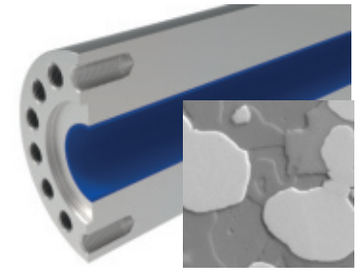
Hard metal alloy on iron base with added vanadium. Very high wear and corrosion resistance with enhanced ductility.



PREMIUM

For Plastics with a Filler Content > 40 %

Two-phase hard metal alloy on nickel base with tungsten carbides. Maximum wear and corrosion resistance.



SELECT

For Special Applications

We offer special alloys for highly demanding applications such as the processing of PTFE, PFA, or FEP.

IF YOU DON'T ASK, YOU PAY MORE

Asking the right questions is the only route to better wear protection – and longer barrel life per Euro.

› What does an alloy offer besides **hardness**?

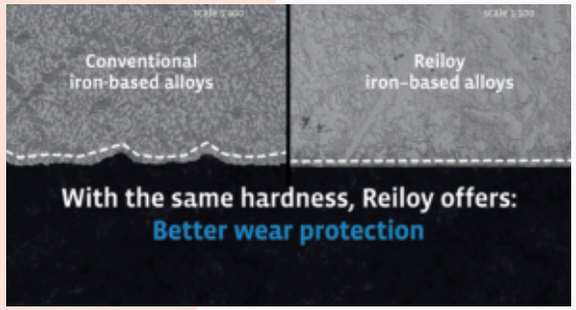
› How is **cost effectiveness** measured?

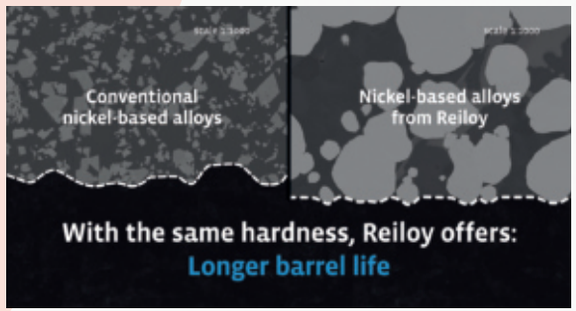
› What is the density of the **ceramic phases**?

› How big are the **carbides?**

Scan
to get answers

Reiloy rules.





THE BETTER ALLOY FOR LONGER BARREL LIFE

With wear protection from Reiloy you produce longer than with any other product. Because our alloys are proven to provide the best wear protection in the industry.

Nickel-Based Alloys

How Big Are the Carbides?

This should be your main question with nickel-based alloys. **Our answer:** ten times larger than the competition. They are a particularly dense protective shield against the forces of abrasion – and have the same hardness.

Scan to learn more

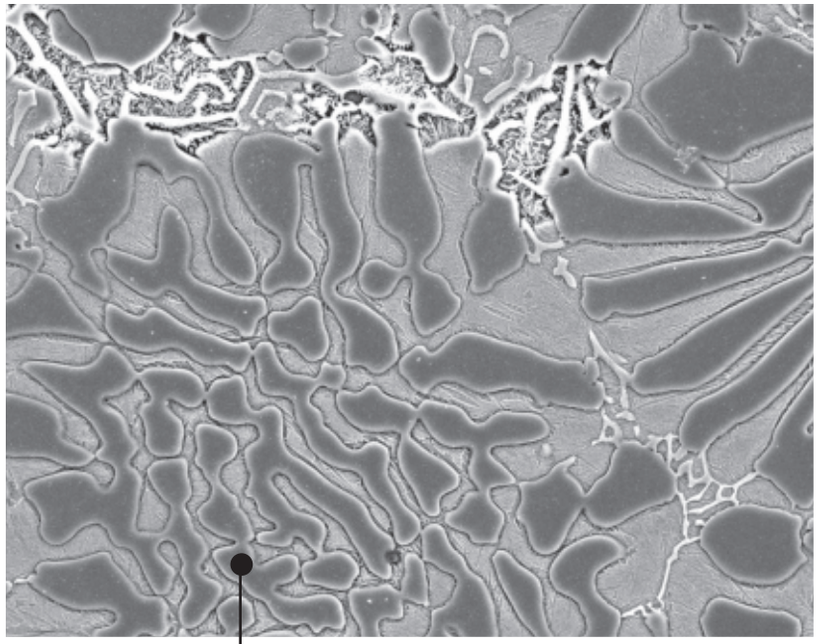
Iron-Based Alloys

How High Is the Ceramic Phase Density?

This question should be asked for iron-based alloys. Then compare the concentration and size of the ceramic phases. Both are significantly higher at Reiloy. **Your benefit:** enhanced wear protection at the same price.

Scan to learn more

- **Longer wear protection**
- Proven **longer barrel life**
- **Precise matching** of materials and their additives
- Alloys with **powders developed in-house**
- **Process-optimizing surface** with exceptional honing pattern
- The best **cost-benefit ratio** in the industry



Highest density of ceramic phases

Ten times larger carbides than common in the market

AN INVESTMENT IN WEAR PROTECTION ALWAYS PAYS OFF"

Read the customer success story

Dr. Klaus Fellner
Leader Application Technologies at ENGEL Austria GmbH

Production Sites

At our production sites in Germany and the USA, we ensure consistent quality worldwide with hard material alloys made in Germany.

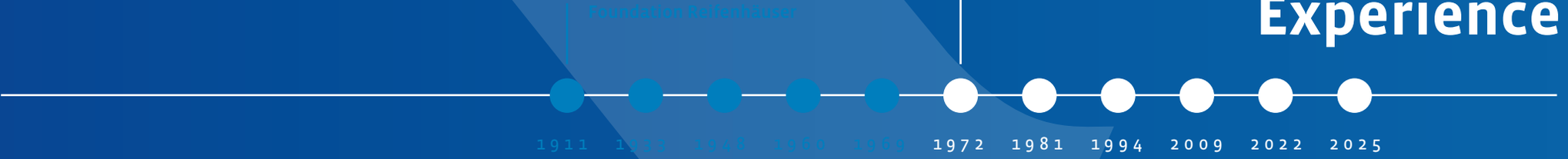
We understand the overall process because we benefit from the know-how of the large network within the Reifenhäuser Group.

1,500

EMPLOYEES 2025

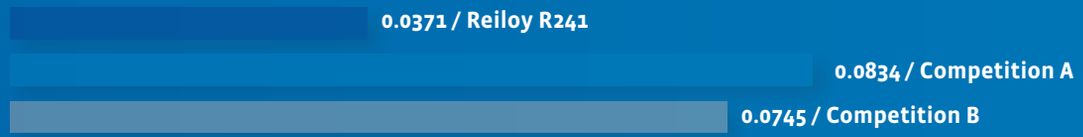
>50 years

Experience

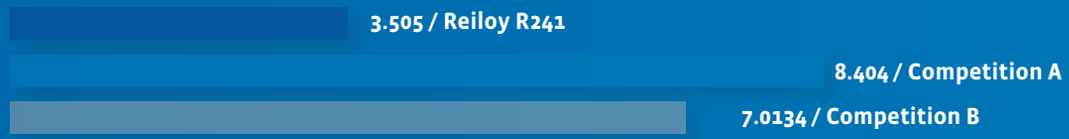


R241: Exceptional Wear Performance

Mass difference in g*



Volume difference in mm³*



Values determined in a test by an independent institute.

Reiloy 121

Best wear and corrosion protection in its class. Values determined in a test by an independent institute.

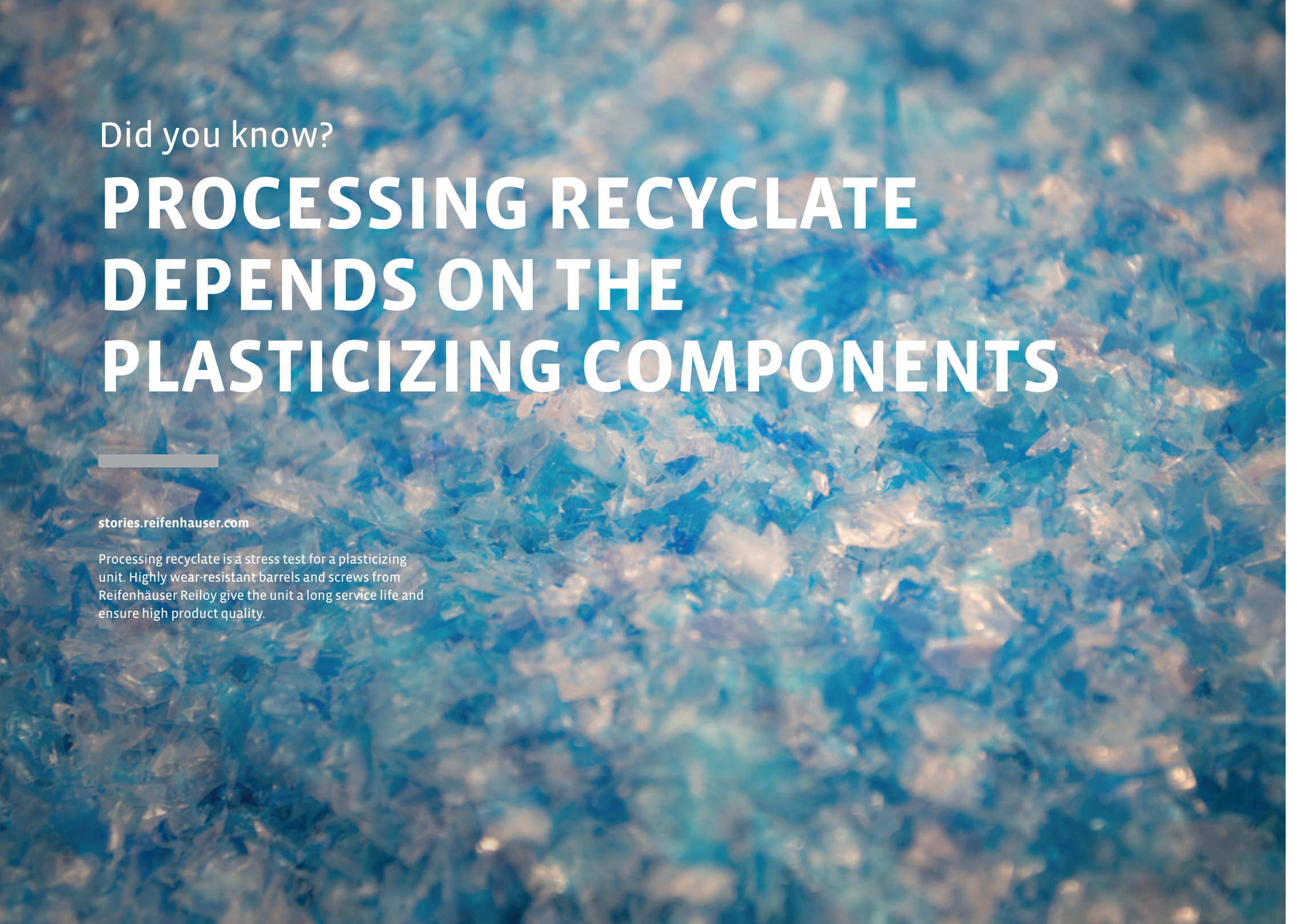
We are the only manufacturer that produces its own alloy powders – for consistent top quality.

Highest Density of Ceramic Phases

Our iron-based alloys offer the highest verified density of ceramic phases for the best protection against abrasion and adhesion.

10x Larger Carbides

And thus the largest carbides among the nickel-based alloys in the market.



Did you know?

PROCESSING RECYCLATE DEPENDS ON THE PLASTICIZING COMPONENTS

stories.reifenhauser.com

Processing recyclate is a stress test for a plasticizing unit. Highly wear-resistant barrels and screws from Reifenhäuser Reiloy give the unit a long service life and ensure high product quality.

Stress is especially high in the feed zone of the extrusion or injection-molding line, i.e. when the granulate has not yet fully melted and the abrasive, corrosive or adhesive properties of the additives have a direct impact.

Whether your company is a film producer, injection molder or line manufacturer, processing recyclate involves many challenges because recyclate is a rather complex raw material. After all, the material has already had at least one life.

Recyclate Is a Bag of Surprises

It's not always clear what additives were used when the product was first manufactured. How carefully was the feedstock sorted? How meticulously was it cleaned? Does it contain any (aggressive) residual substances? Regranulation also changes the properties of the plastic.

All these aspects can affect the quality of the recyclate. So, when recyclate is processed, special additives are added to make sure the polymer becomes a high-quality product again. Otherwise, the only option would be downcycling, i.e. manufacturing a product of lower quality than the original product.

Additives Act like Sandpaper

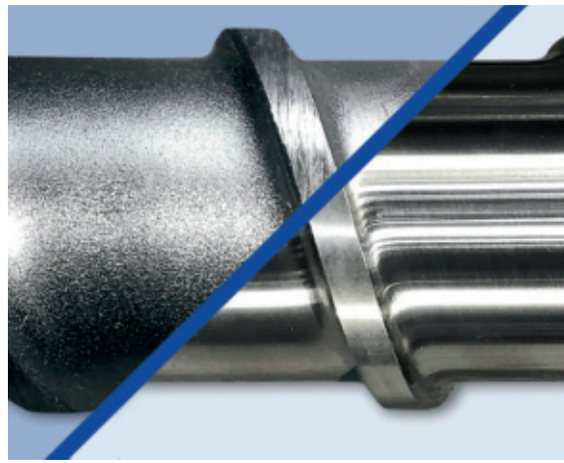
Many additives pose a challenge for the plasticizing unit - for example, because they have an abrasive effect. Other additives tend to stick or act aggressively due to inorganic acids. Many dyes and fillers also stress the components.

Recyclate: A Hazard for Production

Damage to the surface of the plasticizing unit during recyclate processing makes it impossible to produce high-quality material. In addition, there must be constant pressure in the system to ensure process stability – and this is not possible with damaged components. This results in the process becoming no longer controllable and, in the worst case, the line eventually shutting down.

Scan to continue reading online

There are different types of wear: abrasion, corrosion, and adhesion. All of them result in surface damage.



REILOY'S SPECIAL EXTRUSION KNOW-HOW

Where does Reiloy's specific extrusion know-how come from and what do you as a customer gain from it? An interview with the application technology team leader at Reifenhäuser.

Scan to read the interview

Service

DESIGN CONSULTING AND OPTIMIZATION

Know-How for Your Extrusion and Injection-Molding Processes

Scan
to learn more

If you tell us your desired plasticizing performance, we will supply you with perfectly matched components to ensure optimum melt homogeneity and end product quality. Our service is available to you and covers all manufacturers and applications. In addition to selecting the appropriate wear-resistant alloy, we will also adapt the screw geometry individually to your process, for example.

- ☆ Unique range
- ☆ All manufacturers
- ☆ All applications

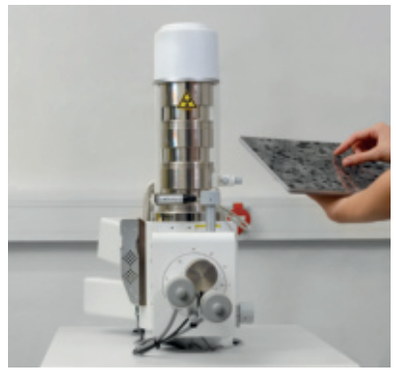
UNIQUE IN THE MARKET: IN-HOUSE POWDER PRODUCTION FOR ALLOYS

Currently, Reiloy is the only supplier that uses its proprietary powders for alloy production. What's in it for you? An interview with the Head of Research & Development explains.

Scan
to read
the interview

For Future Success

RESEARCH & DEVELOPMENT



For the Best Wear Protection in the Market and More Barrel Life per Euro

Even well-engineered products have potential for enhancement. We exploit this potential by looking deeper into the causes of wear. We continuously expand this knowledge of the ideal way in which the screw, barrel and processed polymer interact. On the basis of this knowledge we develop new alloys that let you produce even more cost-effectively. Our goal is always to give you more barrel service life per Euro.

- ☆ In-house alloy production
- ☆ Modern laboratory including scanning electron microscopy
- ☆ Close networking with research institutes

LET'S TALK ABOUT YOUR GOALS!

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